

# ACT Profile Report - State

Graduating Class 2009  
Iowa





## Table of Contents

<b>Section I: Executive Summary</b>	<b>Page 5</b>
Percent of Your Students Ready for College-Level Coursework	
Five Year Trends—Percent of Students Meeting College Readiness Benchmarks	
Five Year Trends—Average ACT Scores	
Five Year Trends—Average ACT Scores by Level of Preparation	
Five Year Trends—Percent and Average Composite Score by Race/Ethnicity	
<b>Section II: Academic Achievement</b>	<b>Page 9</b>
ACT Score Distributions, Cumulative Percentages, Averages, and Quartile Values	
Average ACT Composite Scores for Race/Ethnicity by Level of Preparation	
Average ACT Scores by Race/Ethnicity	
Percent of Students in College Readiness Standards Score Ranges	
Average ACT Scores by Gender	
Percent of Students Meeting College Readiness Benchmark Scores by Gender	
College Readiness Benchmark Percent and Average ACT Scores by Overall High School Curriculum	
College Readiness Benchmark Percent and Average ACT Scores by Content-Specific Curriculum	
<b>Section III: College Readiness &amp; Impact of Course Rigor</b>	<b>Page 15</b>
Percent of Students Meeting ACT College Readiness Benchmark Scores by Race/Ethnicity	
Average ACT Scores and Average ACT Score Changes by Common Course Patterns	
College Readiness Percents by Common Course Patterns	
<b>Section IV: Career and Educational Aspirations</b>	<b>Page 23</b>
Distribution of Planned Educational Majors for All Students by College Plans	
Average ACT Composite Scores for Racial/Ethnic Groups by Post-Secondary Educational Aspirations	
Students' Score Report Preferences at Time of Testing	
<b>Section V: Optional Writing Test Results</b>	<b>Page 27</b>
Average ACT English and Writing Scores by Race/Ethnicity and Gender for students who took ACT Writing	

This report provides information about the performance of your 2009 graduating seniors who took the ACT as sophomores, juniors, or seniors; and self-reported at the time of testing that they were scheduled to graduate in 2009 and tested under standard time conditions.

This report focuses on:

**Performance** - student test performance in the context of college readiness

**Access** - number of your graduates exposed to college entrance testing and the percent of race/ethnicity participation

**Course Selection** - percent of students pursuing a core curriculum

**Course Rigor** - impact of rigorous coursework on achievement

**College Readiness** - percent of students meeting ACT College Readiness Benchmark Scores in each content area

**Awareness** - extent to which student aspirations match performance

**Articulation** - colleges and universities to which your students send test results

Each year, test data for a school, district, and the state represents a different cohort of students. ACT encourages educators to focus on trends (3, 5, 10 years), not year-to-year changes. Such changes can represent normal – even expected – fluctuations. On the other hand, trend lines offer more insight into what is happening in a school, district, or the state.

Further, ACT encourages educators to measure student performance in the context of college readiness measures. The focus should be on the number and percentage of students meeting or exceeding ACT's College Readiness Benchmark Scores, a measure that is much more meaningful and understandable than an average composite score for a group of students.

**The ACT is a curriculum-based measure of college readiness. ACT components include:**

- Tests of academic achievement in English, math, reading, science, and writing (optional)
- High school grade and course information
- Student Profile Section
- Career Interest Inventory

**The ACT:**

Every few years, ACT conducts the **ACT National Curriculum Survey** to ensure its curriculum-based assessment tools accurately measure the skills high school teachers teach and instructors of entry-level college courses expect. The ACT is the only college readiness test designed to reflect the results of such a survey.

ACT's **College Readiness Standards** are sets of statements intended to help students, parents and educators understand the meaning of test scores. The standards relate test scores to the types of skills needed for success in high school and beyond. They serve as a direct link between what students have learned and what they are ready to do next. The ACT is the only college readiness test for which scores can be tied directly to standards.

Only the ACT reports **College Readiness Benchmark Scores** – A benchmark score is the minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college courses, which include English Composition, Algebra, Social Science and Biology. These scores were empirically derived based on the actual performance of students in college. The College Readiness Benchmark Scores are:

College Course/Course Area	ACT Test	Benchmark Score
English Composition	English	18
Algebra	Mathematics	22
Social Sciences	Reading	21
Biology	Science	24

For more information, go to [www.act.org](http://www.act.org)

## How to Improve Scores and Increase College Readiness

29% of your students met all four ACT College Readiness Benchmark Scores (Table 1.1). To improve students' scores and increase the percentage of students identified as college ready, ACT suggests:

**PROVIDING ACCESS FOR ALL STUDENTS TO TAKE THE ACT:** 22,377 of your students are included in this report (the 'cohort'). Increasing access insures that more students have the opportunity to consider college and allows the reader to use this report to evaluate how well courses and instructional programs are preparing students for college and work.

**MAKING CORE CURRICULUM A PRIORITY:** Emphasize the need for all students to develop college and work ready skills, regardless of postsecondary aspirations. 78% of the students in the cohort reported taking courses that would be considered 'Core or More' (Table 1.4).

**MAKING SURE STUDENTS ARE TAKING THE RIGHT KINDS OF COURSES:** Table 3.2 reports 7% of the cohort took less than three years of math courses. Of these students, 8% were college ready. 20% of the cohort reported taking the minimum math core (Algebra I, Algebra II, and Geometry). 20% of these students were college ready. In comparison, 63% of the students who advanced beyond minimum math core were college ready. Getting more students ready for Algebra prior to 9th grade will increase the chances that students will be prepared for and take advanced-level math courses.

Similarly, Table 3.2 reports 10% of the cohort took less than three years of natural science courses. 15% of these students were college ready. In comparison, 40% of students who took at least three years of science coursework were college ready.

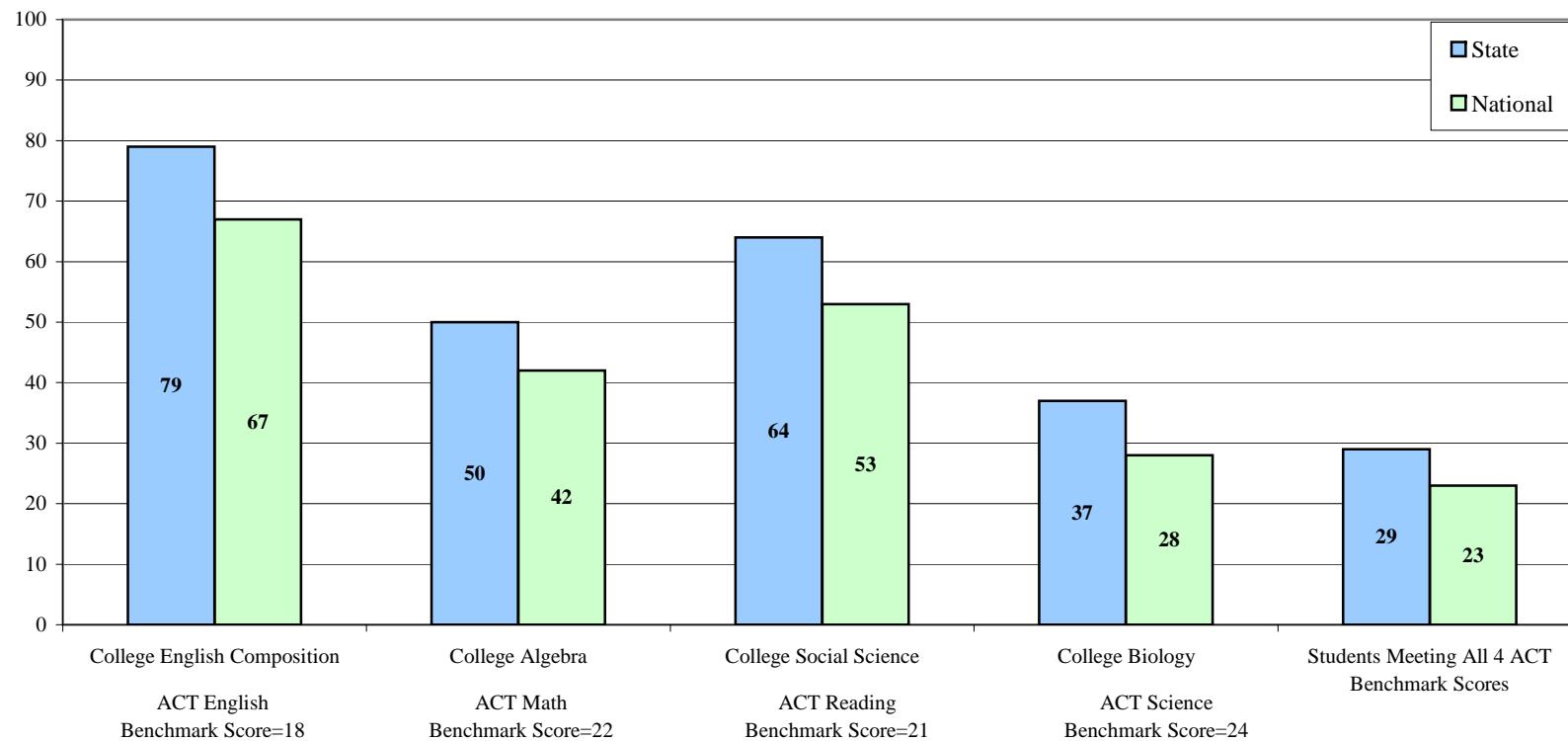
**EVALUATING RIGOR OF COURSES:** Table 2.6 reports the percentage of students falling in each of the ACT College Readiness Standards score ranges. For example, approximately 37% of the cohort fall into the lowest three Mathematics score ranges. To increase these students' achievement, identify the standards they should focus on next by accessing ACT's College Readiness Standards at [www.act.org/standard](http://www.act.org/standard).

**PLAN GUIDANCE ACTIVITIES BASED ON STUDENTS' CAREER AND COLLEGE ASPIRATIONS:** Data in Tables 4.1 and 4.2 enable the reader to determine if aspirations are consistent with academic performance and whether among students with similar aspirations, academic performance is consistent across racial/ethnic groups.

For more information on interpreting data in this report, or to learn how ACT can help your students improve their readiness for college and the workplace, contact your regional office at 847-634-2560.

# Section I

# Executive Summary

**Figure 1.1. Percent of Your Students Ready for College-Level Coursework**

A benchmark score is the minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a B or higher or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college course.

**Table 1.1. Five Year Trends—Percent of Students Meeting College Readiness Benchmarks**

Year	Number of Students Tested		Percent Meeting Benchmarks									
	State	National	English		Mathematics		Reading		Science		Meeting All Four	
			State	National	State	National	State	National	State	National	State	National
2005	22,545	1,186,251	77	68	48	41	59	51	34	26	26	21
2006	22,233	1,206,455	77	69	50	42	62	53	35	27	27	21
2007	23,016	1,300,599	78	69	50	43	61	53	36	28	28	23
2008	22,950	1,421,941	79	68	50	43	63	53	37	28	29	22
<b>2009</b>	<b>22,377</b>	<b>1,480,469</b>	<b>79</b>	<b>67</b>	<b>50</b>	<b>42</b>	<b>64</b>	<b>53</b>	<b>37</b>	<b>28</b>	<b>29</b>	<b>23</b>

**Table 1.2. Five Year Trends—Average ACT Scores**

Year	Number of Students Tested		Average ACT Scores									
	State	National	English		Mathematics		Reading		Science		Composite	
			State	National	State	National	State	National	State	National	State	National
2005	22,545	1,186,251	21.5	20.4	21.7	20.7	22.4	21.3	22.1	20.9	22.0	20.9
2006	22,233	1,206,455	21.6	20.6	21.8	20.8	22.5	21.4	22.1	20.9	22.1	21.1
2007	23,016	1,300,599	21.6	20.7	21.9	21.0	22.6	21.5	22.3	21.0	22.3	21.2
2008	22,950	1,421,941	21.9	20.6	22.0	21.0	22.9	21.4	22.3	20.8	22.4	21.1
<b>2009</b>	<b>22,377</b>	<b>1,480,469</b>	<b>21.9</b>	<b>20.6</b>	<b>21.9</b>	<b>21.0</b>	<b>22.9</b>	<b>21.4</b>	<b>22.4</b>	<b>20.9</b>	<b>22.4</b>	<b>21.1</b>

**Table 1.3. Five Year Trends—Average ACT Scores Nationwide**

Year	Number of Students Tested		Average ACT Scores					
	State	National	English	Mathematics	Reading	Science	Composite	
			State	National	State	National	State	National
2005	1,186,251		20.4	20.7	21.3	20.9	20.9	
2006	1,206,455		20.6	20.8	21.4	20.9	21.1	
2007	1,300,599		20.7	21.0	21.5	21.0	21.2	
2008	1,421,941		20.6	21.0	21.4	20.8	21.1	
<b>2009</b>	<b>1,480,469</b>		<b>20.6</b>	<b>21.0</b>	<b>21.4</b>	<b>20.9</b>	<b>21.1</b>	

**Table 1.4. Five Year Trends—Average ACT Scores by Level of Preparation**

Year	Number of Students Tested		Percent <sup>2</sup>		English		Mathematics		Reading		Science		Composite	
	Core or More <sup>1</sup>	Less than Core	Core or More	Less than Core	Core or More	Less than Core	Core or More	Less than Core	Core or More	Less than Core	Core or More	Less than Core	Core or More	Less than Core
2005	14,799	6,565	66	29	22.4	19.5	22.6	19.7	23.2	20.6	22.8	20.6	22.9	20.2
2006	14,034	6,549	63	29	22.5	19.6	22.7	20.0	23.4	20.8	22.8	20.7	23.0	20.4
2007	13,735	6,727	60	29	22.5	19.8	22.7	20.1	23.4	21.0	23.0	20.9	23.1	20.6
2008	15,732	5,814	69	25	22.6	19.8	22.7	20.1	23.5	21.2	22.9	20.7	23.1	20.6
<b>2009</b>	<b>17,450</b>	<b>4,613</b>	<b>78</b>	<b>21</b>	<b>22.6</b>	<b>19.3</b>	<b>22.6</b>	<b>19.4</b>	<b>23.6</b>	<b>20.6</b>	<b>23.0</b>	<b>20.3</b>	<b>23.1</b>	<b>20.1</b>

<sup>1</sup>"Core or More" results correspond to students taking four or more years of English AND three or more years each of math, social studies, and natural science.

<sup>2</sup>Percent of all students tested. Numbers will not add up to 100% due to student non-response.

**Table 1.5. Five Year Trends—Percent and Average Composite Score by Race/Ethnicity**

	2005			2006			2007			2008			2009		
	N	%	Avg												
All Students	22,545	100	22.0	22,233	100	22.1	23,016	100	22.3	22,950	100	22.4	22,377	100	22.4
African American/Black	357	2	17.9	338	2	18.3	402	2	18.5	435	2	17.8	448	2	18.3
American Indian/Alaska Native	69	0	19.9	80	0	20.5	64	0	20.5	67	0	20.9	81	0	20.2
Caucasian American/White	20,100	89	22.2	19,379	87	22.3	19,388	84	22.4	19,938	87	22.5	19,741	88	22.6
Hispanic	393	2	20.0	373	2	19.8	448	2	20.1	461	2	20.1	556	2	19.9
Asian American/Pacific Islander	411	2	21.9	457	2	22.2	381	2	22.7	444	2	22.7	429	2	22.7
Other/No Response	1,215	5	22.1	1,606	7	22.0	2,333	10	22.4	1,605	7	22.8	1,122	5	22.6

# Section II

# Academic Achievement

**Table 2.1. ACT Score Distributions, Cumulative Percentages (CP<sup>1</sup>), and Score Averages**

ACT Scale Score	English		Mathematics		Reading		Science		Composite		ACT Scale Score
	N	CP	N	CP	N	CP	N	CP	N	CP	
36	63	100	54	100	215	100	71	100	8	100	36
35	249	100	118	100	101	99	91	100	56	100	35
34	308	99	194	99	426	99	136	99	120	100	34
33	295	97	260	98	608	97	173	99	171	99	33
32	336	96	255	97	466	94	196	98	284	98	32
31	357	94	301	96	691	92	287	97	385	97	31
30	557	93	304	95	948	89	419	96	591	95	30
29	599	90	671	93	832	85	545	94	677	93	29
28	693	88	792	90	934	81	702	91	869	90	28
27	775	85	967	87	976	77	828	88	1,013	86	27
26	1,052	81	1,404	82	998	72	1,262	85	1,294	81	26
25	1,426	76	1,524	76	990	68	2,150	79	1,438	76	25
24	1,316	70	1,606	69	1,327	63	1,504	69	1,669	69	24
23	1,510	64	1,505	62	1,575	57	2,117	63	1,791	62	23
22	1,690	57	1,262	56	1,368	50	2,095	53	1,933	54	22
21	2,034	50	1,459	50	1,927	44	1,992	44	1,973	45	21
20	1,705	41	1,413	43	1,411	36	2,388	35	1,890	36	20
19	1,540	33	1,488	37	1,465	29	1,786	24	1,738	28	19
18	1,064	26	1,634	30	934	23	1,210	16	1,453	20	18
17	1,042	21	2,025	23	1,148	19	608	11	1,069	14	17
16	1,104	17	1,782	14	950	14	592	8	847	9	16
15	919	12	952	6	682	9	356	5	502	5	15
14	511	8	299	2	620	6	299	4	343	3	14
13	404	6	74	1	380	4	262	3	165	1	13
12	274	4	27	1	200	2	143	1	74	1	12
11	230	2	4	1	136	1	92	1	14	1	11
10	167	1	3	1	42	1	35	1	10	1	10
9	101	1	0	1	9	1	28	1	0	1	9
8	39	1	0	1	10	1	8	1	0	1	8
7	15	1	0	1	6	1	1	1	0	1	7
6	1	1	0	1	1	1	1	1	0	1	6
5	1	1	0	1	1	1	0	1	0	1	5
4	0	1	0	1	0	1	0	1	0	1	4
3	0	1	0	1	0	1	0	1	0	1	3
2	0	1	0	1	0	1	0	1	0	1	2
1	0	1	0	1	0	1	0	1	0	1	1
Avg (SD)	21.9 (5.5)		21.9 (4.8)		22.9 (5.7)		22.4 (4.4)		22.4 (4.5)		Avg (SD)

<sup>1</sup>CP is the cumulative percent of students at or below a score point.

Note: Shaded portions of columns identify the students who met/exceeded the ACT College Readiness Benchmark Scores.

**Table 2.2. ACT Subscore Distributions, Cumulative Percentages (CP<sup>1</sup>), and Subtest Score Averages**

ACT Scale Score	English				Reading				Mathematics						ACT Scale Score	
	Usage/ Mechanics		Rhetorical Skills		Social Studies		Arts/ Literature		Pre/Elementary Algebra		Algebra/ Coordinate Geometry		Plane Geometry/ Trigonometry			
	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP	N	CP		
18	807	100	255	100	747	100	1,072	100	847	100	187	100	193	100	18	
17	829	96	228	99	1,095	97	982	95	1,301	96	196	99	125	99	17	
16	1,110	93	1,342	98	1,327	92	2,051	91	1,271	90	636	98	799	99	16	
15	1,336	88	1,593	92	1,893	86	2,152	82	1,596	85	658	95	1,387	95	15	
14	1,288	82	1,822	85	1,633	77	2,084	72	1,777	78	2,285	93	1,971	89	14	
13	1,749	76	2,182	77	2,027	70	1,394	63	1,905	70	1,799	82	3,160	80	13	
12	2,054	68	3,219	67	2,507	61	2,011	56	2,514	61	3,010	74	2,124	66	12	
11	2,280	59	2,777	52	2,361	50	2,335	48	2,291	50	2,669	61	3,242	56	11	
10	3,033	49	3,021	40	2,355	39	1,930	37	2,324	40	4,676	49	3,104	42	10	
9	2,560	35	2,388	27	2,509	29	1,562	28	1,840	29	2,788	28	2,560	28	9	
8	1,658	24	1,634	16	1,711	18	1,917	21	2,249	21	1,858	16	1,872	17	8	
7	1,504	16	929	9	1,326	10	1,139	13	1,776	11	760	7	595	8	7	
6	1,060	10	394	4	540	4	839	8	503	3	355	4	583	6	6	
5	604	5	332	3	191	2	571	4	102	1	331	2	366	3	5	
4	351	2	173	1	71	1	215	2	57	1	73	1	145	1	4	
3	124	1	77	1	58	1	92	1	18	1	63	1	108	1	3	
2	29	1	10	1	21	1	31	1	6	1	13	1	29	1	2	
1	1	1	1	1	5	1	0	1	0	1	20	1	14	1	1	
Avg (SD)	11.0 (3.5)		11.3 (2.9)		11.7 (3.2)		11.8 (3.6)		11.7 (3.3)		10.9 (2.6)		11.1 (2.8)		Avg (SD)	

<sup>1</sup>CP is the cumulative percent of students at or below a score point.

**Table 2.3. ACT Score Quartile Values**

Quartile	English	Mathematics	Reading	Science	Composite
Q3 (75th Percentile)	25	25	27	25	25
Q2 (50th Percentile)	22	22	22	22	22
Q1 (25th Percentile)	18	18	19	20	19

**Table 2.4. Average ACT Composite Scores for Race/Ethnicity by Level of Preparation**

Student Group	Race/Ethnicity	Number of Students Tested	Percent Taking Core or More <sup>1</sup>	Average ACT Composite Score Core or More	Average ACT Composite Score Less Than Core
State	All Students	22,377	78	23.1	20.1
	African American/Black	448	62	19.3	16.9
	American Indian/Alaska Native	81	60	21.2	18.8
	Caucasian American/White	19,741	79	23.2	20.2
	Hispanic	556	67	20.8	18.2
	Asian American/Pacific Islander	429	82	23.2	20.4
	Other/No Response	1,122	74	23.3	20.4
National	All Students	1,480,469	70	22.0	19.1
	African American/Black	196,149	64	17.6	15.9
	American Indian/Alaska Native	15,773	59	20.1	17.4
	Caucasian American/White	941,206	73	23.0	20.1
	Hispanic	133,569	67	19.6	17.3
	Asian American/Pacific Islander	59,093	80	23.7	21.4
	Other/No Response	134,679	63	22.2	19.0

<sup>1</sup>"Core or More" results correspond to students taking four or more years of English AND three or more years each of math, social studies, and natural science.

**Table 2.5. Average ACT Scores by Race/Ethnicity**

Student Group	Race/Ethnicity	English	Mathematics	Reading	Science	Composite
State	All Students	21.9	21.9	22.9	22.4	22.4
	African American/Black	17.2	18.0	18.6	18.8	18.3
	American Indian/Alaska Native	19.8	20.1	20.5	19.9	20.2
	Caucasian American/White	22.1	22.0	23.1	22.5	22.6
	Hispanic	19.0	19.5	20.4	20.2	19.9
	Asian American/Pacific Islander	21.8	23.4	22.4	22.7	22.7
	Other/No Response	22.1	22.0	23.3	22.3	22.6
National	All Students	20.6	21.0	21.4	20.9	21.1
	African American/Black	16.0	17.1	16.9	17.2	16.9
	American Indian/Alaska Native	17.9	18.7	19.4	19.1	18.9
	Caucasian American/White	21.9	21.9	22.6	21.9	22.2
	Hispanic	17.7	19.1	18.9	18.8	18.7
	Asian American/Pacific Islander	22.6	24.5	22.7	22.7	23.2
	Other/No Response	20.4	21.0	21.3	20.7	20.9

**Table 2.6. Percent of Students in College Readiness Standards (CRS) Score Ranges**

Student Group	CRS Range	English		Mathematics		Reading		Science	
		N	%	N	%	N	%	N	%
State	33 to 36	915	4	626	3	1,350	6	471	2
	28 to 32	2,542	11	2,323	10	3,871	17	2,149	10
	24 to 27	4,569	20	5,501	25	4,291	19	5,744	26
	20 to 23	6,939	31	5,639	25	6,281	28	8,592	38
	16 to 19	4,750	21	6,929	31	4,497	20	4,196	19
	13 to 15	1,834	8	1,325	6	1,682	8	917	4
	01 to 12	828	4	34	0	405	2	308	1
National	33 to 36	60,269	4	45,198	3	74,801	5	26,524	2
	28 to 32	154,245	10	139,060	9	205,090	14	104,787	7
	24 to 27	251,396	17	293,477	20	226,630	15	287,693	19
	20 to 23	376,203	25	300,212	20	361,756	24	492,815	33
	16 to 19	303,385	20	495,592	33	334,831	23	367,167	25
	13 to 15	179,194	12	198,214	13	195,336	13	131,197	9
	01 to 12	155,777	11	8,716	1	82,025	6	70,286	5

**Table 2.7. Average ACT Scores by Gender**

Student Group	Gender	Average ACT Scores						
		N	Percent	English	Mathematics	Reading	Science	Composite
State	Males	10,207	46	21.6	22.8	23.0	23.0	22.7
	Females	12,117	54	22.1	21.2	22.8	21.8	22.1
	Missing	53	0	21.4	22.0	22.8	21.8	22.1
National	Males	668,165	45	20.2	21.6	21.3	21.4	21.3
	Females	808,097	55	20.9	20.4	21.4	20.4	20.9
	Missing	4,207	0	20.3	21.2	21.5	20.8	21.1

**Table 2.8. Percent of Students Meeting College Readiness Benchmark Scores by Gender**

Student Group	Gender	Percent of Students					Meet All Four
		English	Mathematics	Reading	Science	All Four	
State	Males	76	57	65	43	34	
	Females	80	44	64	32	25	
National	Males	65	47	52	33	27	
	Females	69	38	53	24	20	

**Table 2.9. College Readiness Benchmark (CRB) Percent and Average ACT Scores by Overall High School Curriculum**

Student Group	Curriculum Taken <sup>1</sup>	N	English		Mathematics		Reading		Science		Composite	
			CRB %	Avg	CRB %	Avg	CRB %	Avg	CRB %	Avg	CRB % <sup>3</sup>	Avg
State	Core or More <sup>2</sup>	17,450	83	22.6	56	22.6	69	23.6	42	23.0	33	23.1
	Less than Core	4,613	62	19.3	28	19.4	48	20.6	21	20.3	13	20.1
	Missing	314	55	19.0	35	19.9	43	20.1	23	20.1	19	19.9
National	Core or More	1,039,502	75	21.7	50	21.9	59	22.3	34	21.7	28	22.0
	Less than Core	391,458	52	18.3	25	18.9	38	19.4	16	19.2	12	19.1
	Missing	49,509	35	15.9	16	17.5	25	17.3	10	17.6	7	17.2

<sup>1</sup>"Curriculum Taken" reflects overall high school curriculum in this table.<sup>2</sup>"Core or More" results correspond to students taking four or more years of English AND three or more years each of math, social studies, and natural science.<sup>3</sup>Composite CRB% results reflect students who meet all four subject-area benchmarks.**Table 2.10. College Readiness Benchmark (CRB) Percent and Average ACT Scores by Content-Specific Curriculum**

Student Group	Curriculum Taken <sup>1</sup>	English			Mathematics			Reading			Science		
		N	CRB %	Avg	N	CRB %	Avg	N	CRB %	Avg	N	CRB %	Avg
State	Core or More	20,667	80	22.1	20,577	53	22.3	20,970	65	23.0	19,928	40	22.7
	Less than Core	1,482	63	19.5	1,514	8	17.1	1,165	50	20.9	2,202	15	19.4
	Missing	228	61	20.0	286	35	20.0	242	47	20.8	247	26	20.8
National	Core or More	1,367,549	70	20.9	1,334,313	46	21.4	1,287,169	55	21.7	1,206,541	32	21.5
	Less than Core	73,276	42	16.8	101,413	7	16.5	151,264	41	19.7	230,683	12	18.4
	Missing	39,644	37	16.1	44,743	17	17.5	42,036	26	17.5	43,245	11	17.7

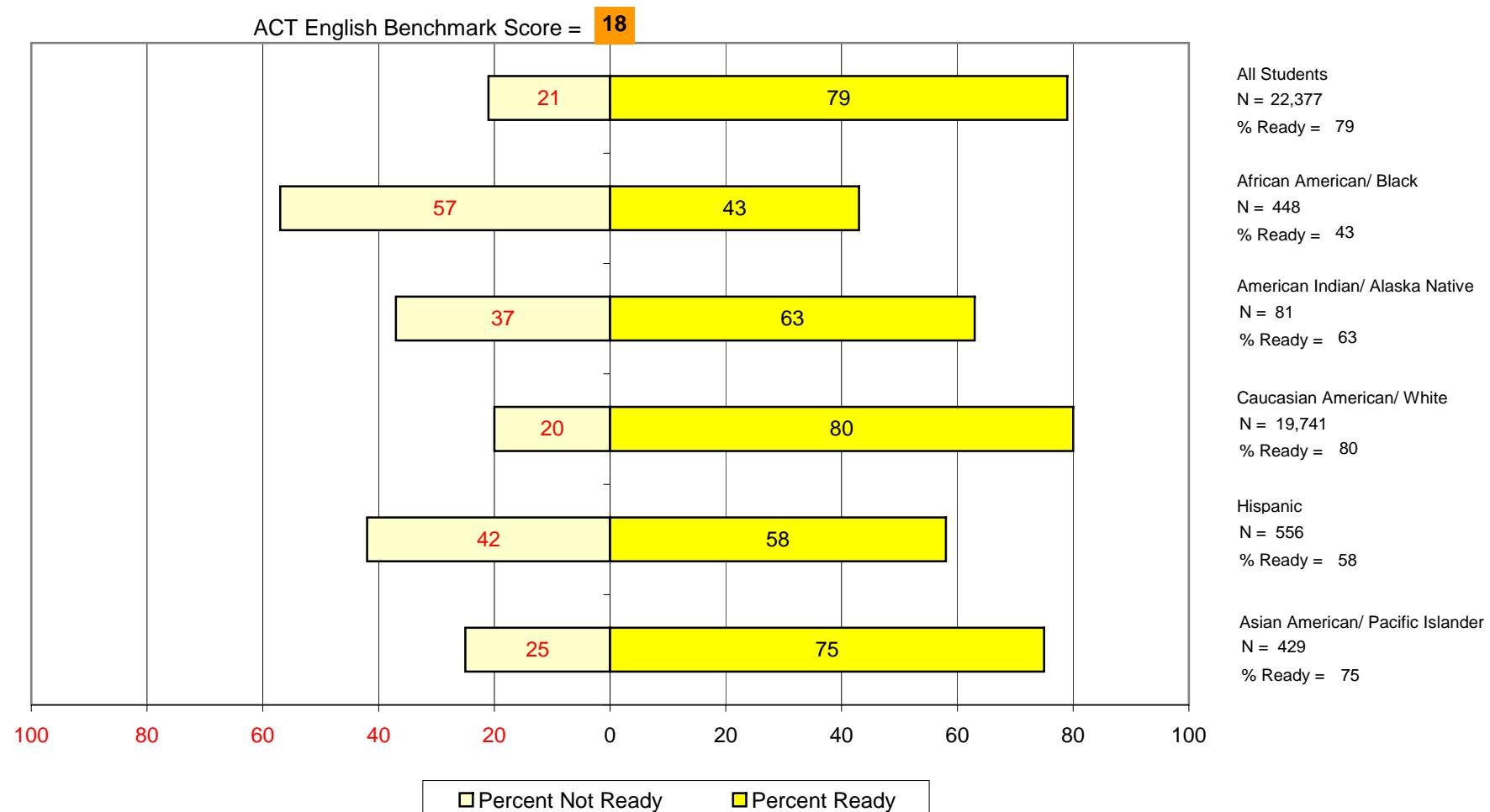
<sup>1</sup>"Curriculum Taken" reflects content-specific curriculum in this table.

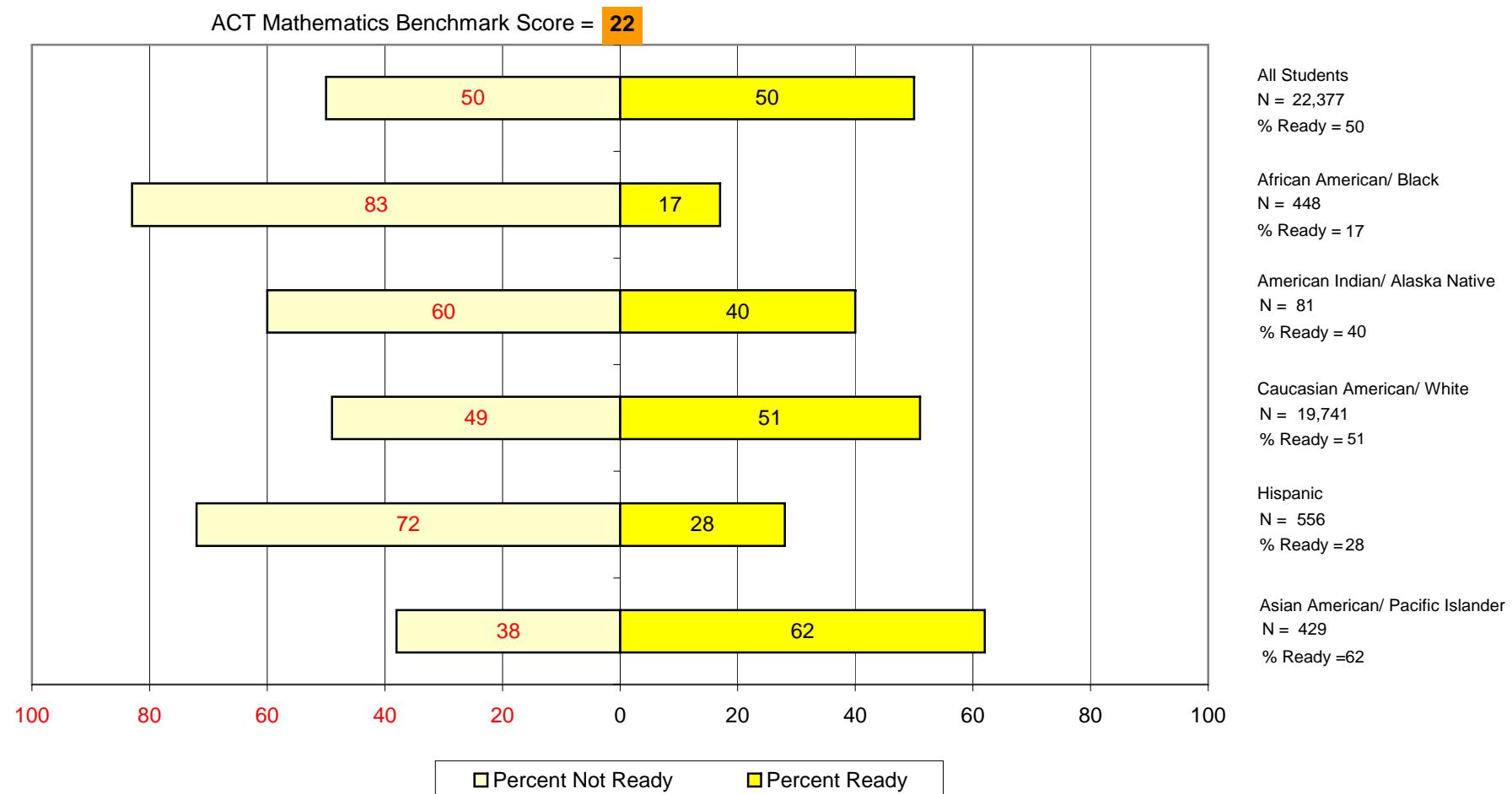
For instance, Reading "Core or More" results correspond to students taking three or more years of social studies, regardless of courses taken in other content areas.

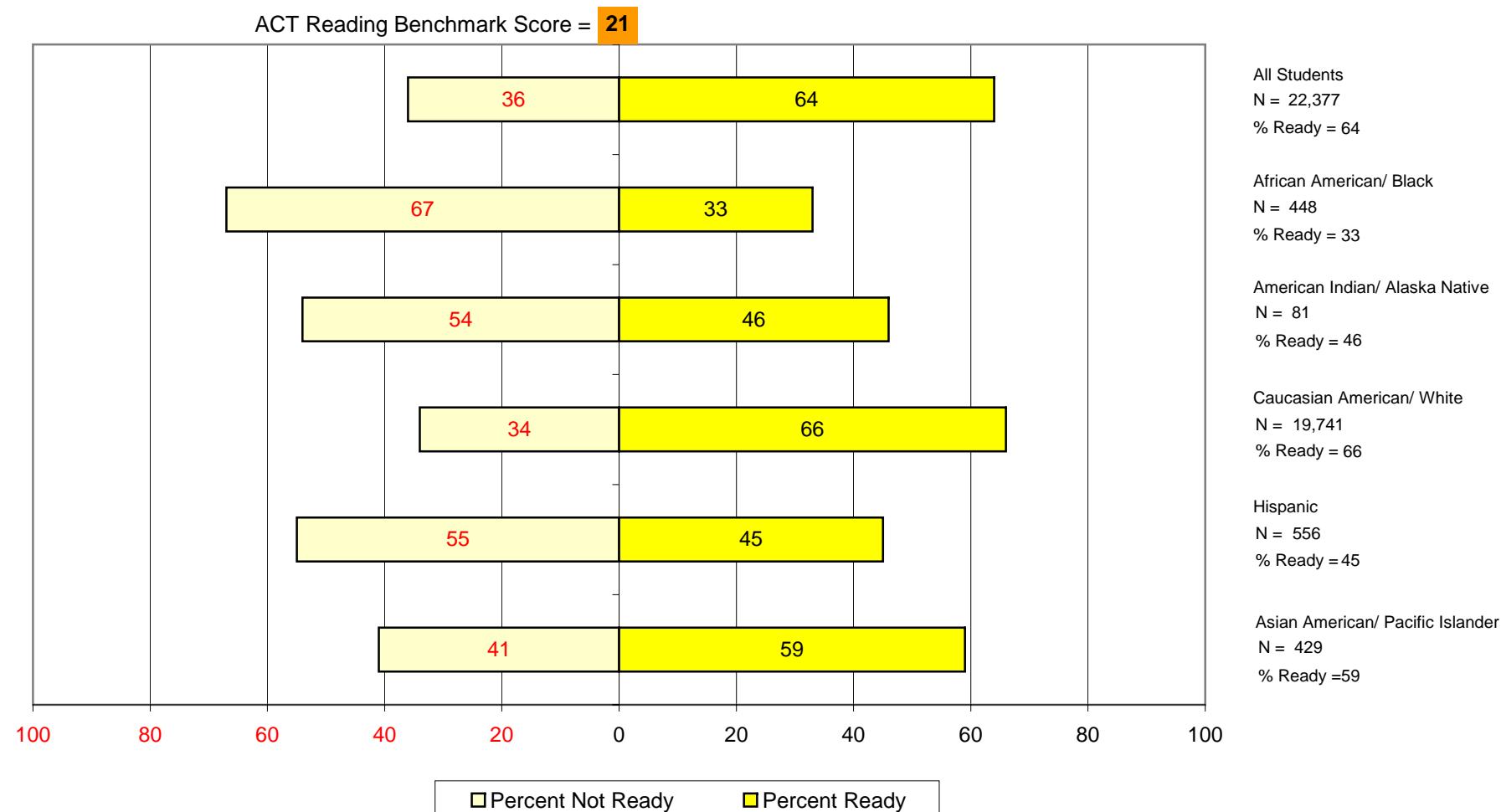
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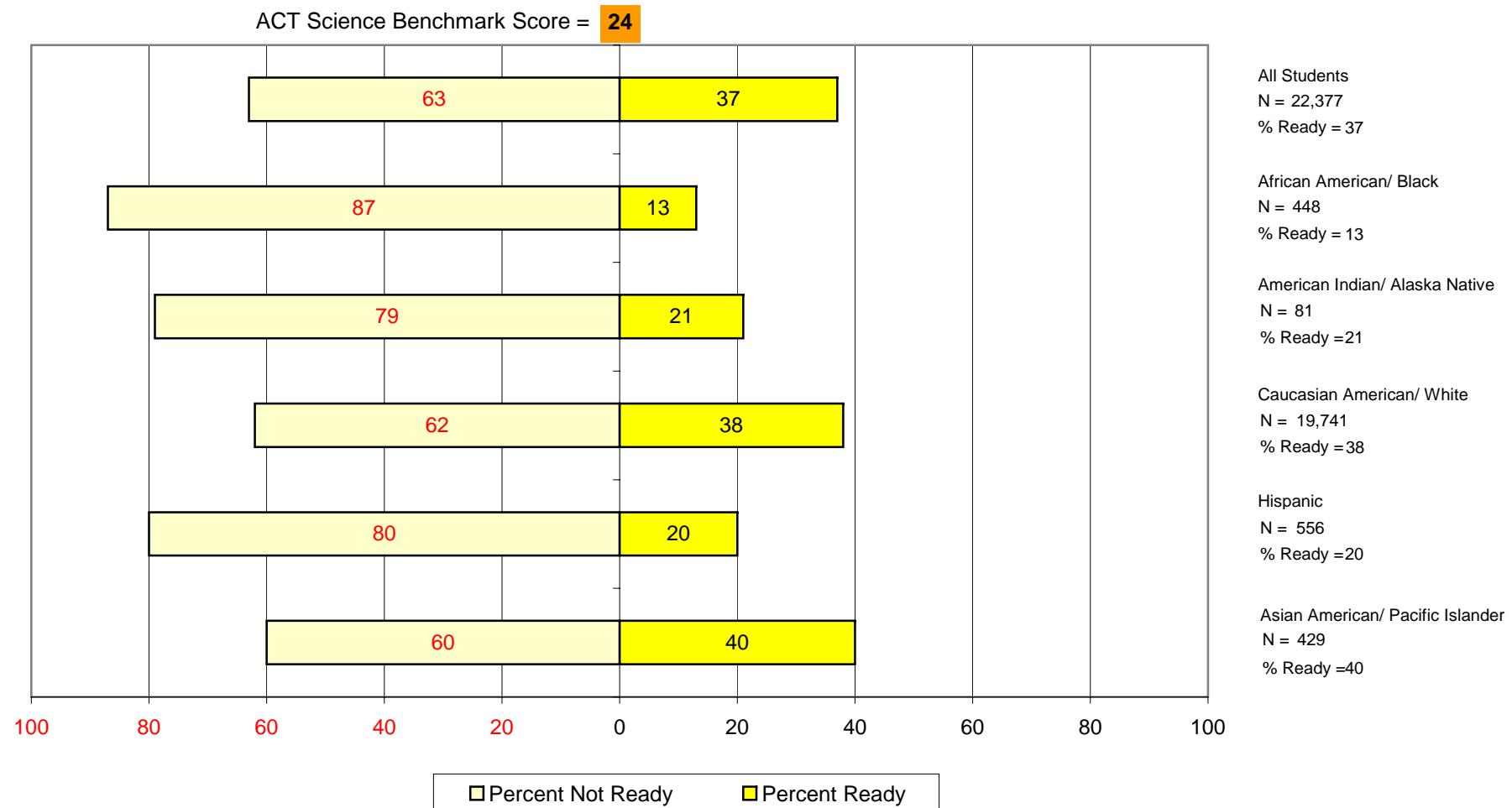
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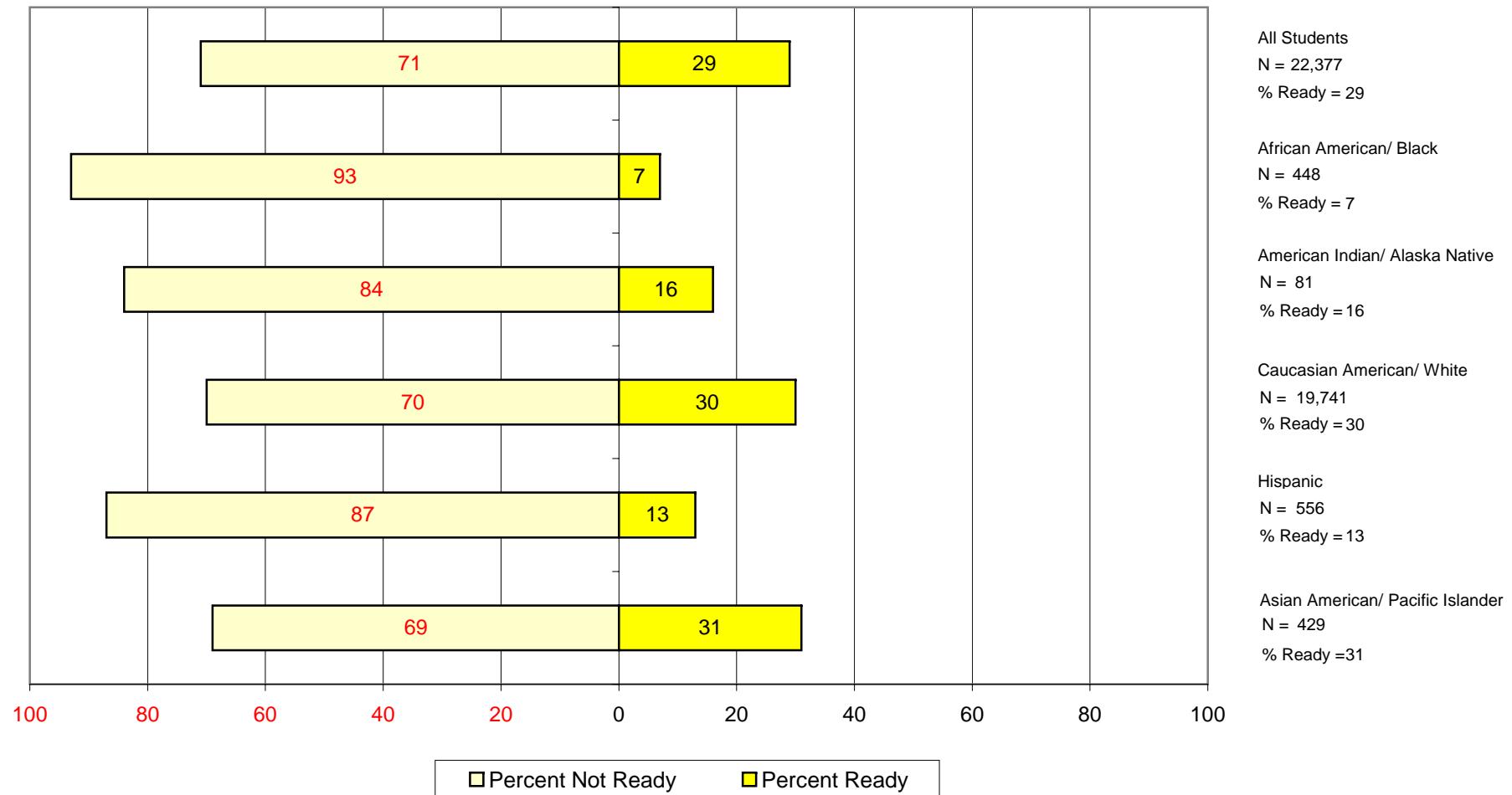
# Impact of Course Rigor

**Figure 3.1. Percent of Students Meeting ACT College Readiness Benchmark Scores by Race/Ethnicity: ENGLISH**

**Figure 3.2. Percent of Students Meeting ACT College Readiness Benchmark Scores by Race/Ethnicity: MATHEMATICS**

**Figure 3.3. Percent of Students Meeting ACT College Readiness Benchmark Scores by Race/Ethnicity: READING**

**Figure 3.4. Percent of Students Meeting ACT College Readiness Benchmark Scores by Race/Ethnicity: SCIENCE**

**Figure 3.5. Percent of Students Meeting ACT College Readiness Benchmark Scores by Race/Ethnicity: ALL FOUR**

**Table 3.1. Average ACT Scores and Average ACT Score Changes by Common Course Patterns**

Course Pattern	All Students					Males					Females				
	N	Percent	ACT English	Course Value Added <sup>1</sup>	N	Percent	ACT English	Course Value Added <sup>1</sup>	N	Percent	ACT English	Course Value Added <sup>1</sup>			
ENGLISH COURSE PATTERN															
Eng 9, Eng 10, Eng 11, Eng 12, & Other English	9,235	41	22.8	3.3	3,726	37	22.6	3.4	5,490	45	22.9	3.1			
Eng 9, Eng 10, Eng 11, Eng 12 (Min. Core)	11,432	51	21.5	2.0	5,635	55	21.2	2.0	5,770	48	21.8	2.0			
Less than 4 years of English	1,485	7	19.5	-	716	7	19.2	-	765	6	19.8	-			
No English course/grade information reported	225	1	20.0	-	130	1	20.5	-	92	1	19.3	-			
MATHEMATICS COURSE PATTERN	N	Percent	ACT Math	Course Value Added <sup>1</sup>	N	Percent	ACT Math	Course Value Added <sup>1</sup>	N	Percent	ACT Math	Course Value Added <sup>1</sup>			
Alg 1, Alg 2, Geom, Trig, & Calc	1,252	6	25.3	8.3	583	6	26.4	9.0	666	5	24.3	7.6			
Alg 1, Alg 2, Geom, Trig, & Other Adv Math	2,096	9	23.1	6.1	871	9	24.1	6.7	1,219	10	22.4	5.7			
Alg 1, Alg 2, Geom, & Trig	1,646	7	21.6	4.6	722	7	22.2	4.8	918	8	21.1	4.4			
Alg 1, Alg 2, Geom, & Other Adv Math	3,519	16	21.2	4.2	1,394	14	21.6	4.2	2,117	17	21.0	4.3			
Other comb of 4 or more years of Math	6,619	30	24.7	7.7	3,485	34	25.4	8.0	3,123	26	23.9	7.2			
Alg 1, Alg 2, & Geom (Min. Core)	4,383	20	18.8	1.8	1,753	17	19.3	1.9	2,621	22	18.4	1.7			
Other comb of 3 or 3.5 years of Math	1,062	5	21.2	4.2	543	5	21.7	4.3	517	4	20.6	3.9			
Less than 3 years of Math	1,559	7	17.0	-	720	7	17.4	-	835	7	16.7	-			
No Math course/grade information reported	241	1	20.5	-	136	1	21.3	-	101	1	19.6	-			
SOCIAL SCIENCE COURSE PATTERN	N	Percent	ACT Reading	Course Value Added <sup>1</sup>	N	Percent	ACT Reading	Course Value Added <sup>1</sup>	N	Percent	ACT Reading	Course Value Added <sup>1</sup>			
US Hist, World Hist, Am Gov, & Other Hist	594	3	22.5	1.6	339	3	22.3	1.3	254	2	22.8	2.0			
Other comb of 4 or more years Social Science	12,246	55	23.3	2.4	5,492	54	23.4	2.4	6,732	56	23.2	2.4			
US Hist, World Hist, & Am Gov (Min. Core)	1,211	5	22.0	1.1	610	6	22.0	1.0	597	5	21.9	1.1			
Other comb of 3 or 3.5 years of Social Science	6,919	31	22.8	1.9	3,068	30	22.8	1.8	3,835	32	22.7	1.9			
Less than 3 years of Social Science	1,170	5	20.9	-	563	6	21.0	-	601	5	20.8	-			
No Soc Sci course/grade information reported	237	1	20.9	-	135	1	21.9	-	98	1	19.4	-			
NATURAL SCIENCE COURSE PATTERN	N	Percent	ACT Science	Course Value Added <sup>1</sup>	N	Percent	ACT Science	Course Value Added <sup>1</sup>	N	Percent	ACT Science	Course Value Added <sup>1</sup>			
Gen Sci <sup>2</sup> , Bio, Chem, & Phys	9,441	42	23.6	4.2	4,831	47	24.4	4.8	4,588	38	22.9	3.7			
Bio, Chem, Phys	1,243	6	25.0	5.6	599	6	25.6	6.0	642	5	24.4	5.2			
Gen Sci <sup>2</sup> , Bio, Chem (Min. Core)	8,586	38	21.4	2.0	3,232	32	21.7	2.1	5,337	44	21.2	2.0			
Other comb of 3 years of Natural Science	658	3	21.7	2.3	386	4	22.3	2.7	269	2	21.0	1.8			
Less than 3 years of Natural Science	2,214	10	19.4	-	1,023	10	19.6	-	1,186	10	19.2	-			
No Nat Sci course/grade information reported	235	1	20.9	-	136	1	21.7	-	95	1	19.7	-			

<sup>1</sup>Course value added is defined as the average ACT score change compared to a less than core course sequence.<sup>2</sup>Includes General, Physical and Earth Sciences.

**Table 3.2. College Readiness Percents by Common Course Patterns**

Course Pattern	N	State			National			
		Percent Taking Pattern	Avg ACT English	Percent Meeting Benchmark	N	Percent Taking Pattern	Avg ACT English	Percent Meeting Benchmark
ENGLISH COURSE PATTERN								
Eng 9, Eng 10, Eng 11, Eng 12, & Other English	9,235	41	22.8	84	338,118	23	22.0	76
Eng 9, Eng 10, Eng 11, Eng 12 (Min. Core)	11,432	51	21.5	77	1,029,431	70	20.6	68
Less than 4 years of English	1,485	7	19.5	64	74,090	5	16.7	42
No English course/grade information reported	225	1	20.0	61	38,830	3	16.1	37
MATHEMATICS COURSE PATTERN	N	Percent Taking Pattern	Avg ACT Math	Percent Meeting Benchmark	N	Percent Taking Pattern	Avg ACT Math	Percent Meeting Benchmark
Alg 1, Alg 2, Geom, Trig, & Calc	1,252	6	25.3	80	92,630	6	24.5	71
Alg 1, Alg 2, Geom, Trig, & Other Adv Math	2,096	9	23.1	66	135,244	9	22.1	56
Alg 1, Alg 2, Geom, & Trig	1,646	7	21.6	49	110,962	7	20.0	35
Alg 1, Alg 2, Geom, & Other Adv Math	3,519	16	21.2	45	220,868	15	20.1	36
Other comb of 4 or more years of Math	6,619	30	24.7	74	455,130	31	23.9	66
Alg 1, Alg 2, & Geom (Min. Core)	4,383	20	18.8	20	248,747	17	17.5	12
Other comb of 3 or 3.5 years of Math	1,062	5	21.2	43	70,732	5	20.1	35
Less than 3 years of Math	1,559	7	17.0	8	105,591	7	16.5	7
No Math course/grade information reported	241	1	20.5	40	40,565	3	17.7	18
SOCIAL SCIENCE COURSE PATTERN	N	Percent Taking Pattern	Avg ACT Reading	Percent Meeting Benchmark	N	Percent Taking Pattern	Avg ACT Reading	Percent Meeting Benchmark
US Hist, World Hist, Am Gov, & Other Hist	594	3	22.5	63	46,754	3	22.8	61
Other comb of 4 or more years Social Science	12,246	55	23.3	67	735,636	50	22.0	57
US Hist, World Hist, & Am Gov (Min. Core)	1,211	5	22.0	58	84,543	6	20.6	47
Other comb of 3 or 3.5 years of Social Science	6,919	31	22.8	63	420,236	28	21.3	52
Less than 3 years of Social Science	1,170	5	20.9	50	152,775	10	19.7	40
No Soc Sci course/grade information reported	237	1	20.9	48	40,525	3	17.5	26
NATURAL SCIENCE COURSE PATTERN	N	Percent Taking Pattern	Avg ACT Science	Percent Meeting Benchmark	N	Percent Taking Pattern	Avg ACT Science	Percent Meeting Benchmark
Gen Sci <sup>1</sup> , Bio, Chem, & Phys	9,441	42	23.6	49	563,824	38	22.2	39
Bio, Chem, Phys	1,243	6	25.0	62	141,531	10	23.3	47
Gen Sci <sup>1</sup> , Bio, Chem (Min. Core)	8,586	38	21.4	27	459,833	31	20.1	21
Other comb of 3 years of Natural Science	658	3	21.7	31	41,353	3	19.8	21
Less than 3 years of Natural Science	2,214	10	19.4	15	233,215	16	18.4	11
No Nat Sci course/grade information reported	235	1	20.9	26	40,713	3	17.7	11

<sup>1</sup>Includes General, Physical and Earth Sciences.

# Section IV

# Career and Educational Aspirations

**Table 4.1. Distribution of Planned Educational Majors for All Students by College Plans**

Planned Educational Major	All Students			Plan on 2 Years or Less of College			Plan on 4 Years or More of College		
	N <sup>1</sup>	Percent <sup>2</sup>	Avg ACT Comp	N	Percent <sup>2</sup>	Avg ACT Comp	N	Percent <sup>2</sup>	Avg ACT Comp
Agriculture Sciences & Technologies	737	3	20.9	99	7	18.4	610	3	21.3
Architecture & Environmental Design	421	2	22.5	17	1	20.1	390	2	22.6
Business & Management	2,312	10	21.8	110	8	18.9	2,106	11	22.0
Business & Office	257	1	20.5	37	3	17.9	202	1	20.9
Marketing & Distribution	182	1	21.6	12	1	19.3	162	1	21.9
Communications & Comm. Technologies	553	2	22.5	27	2	18.7	504	3	22.8
Community & Personal Services	516	2	19.7	83	6	18.1	408	2	20.0
Computer & Information Sciences	528	2	23.4	47	3	19.3	453	2	23.8
Cross-Disciplinary Studies	41	0	22.8	3	0	19.3	33	0	23.6
Education	1,135	5	21.7	32	2	17.9	1,052	5	21.9
Teacher Education	812	4	21.1	17	1	17.4	751	4	21.2
Engineering	1,037	5	24.9	33	2	18.0	967	5	25.1
Engineering-Related Technologies	572	3	23.5	33	2	19.3	520	3	23.9
Foreign Languages	133	1	24.0	2	0	17.5	121	1	24.3
Health Sciences & Allied Health Fields	4,063	18	22.1	284	20	18.6	3,626	19	22.4
Human, Family & Consumer Science	263	1	20.9	36	3	17.8	217	1	21.5
Letters	162	1	25.9	4	0	21.0	150	1	26.0
Mathematics	184	1	25.5	5	0	20.6	170	1	25.6
Philosophy, Religion & Theology	127	1	24.4	6	0	19.5	112	1	24.7
Sciences (Biological & Physical)	1,308	6	24.4	21	1	19.9	1,249	6	24.5
Social Sciences	1,202	5	23.1	18	1	18.1	1,145	6	23.3
Trade & Industrial	260	1	19.9	126	9	19.0	120	1	20.9
Visual & Performing Arts	1,277	6	22.7	78	6	18.8	1,128	6	23.0
Undecided	3,781	17	22.4	259	18	18.4	3,192	16	22.8
No Response	514	2	20.7	13	1	16.5	105	1	22.1

<sup>1</sup>2-Year and 4-Year "N" counts do not reflect "Missing" and "Other" institution types, therefore they may not add up to the N count for All Students.<sup>2</sup>Percent of students tested within College Plan groups (All Students, 2-Year, 4-Year).

**Table 4.2. Average ACT Composite Scores for Racial/Ethnic Groups by Post-Secondary Educational Aspirations**

Educational Degree Aspirations	All Racial/Ethnic Groups Combined		African American/Black		American Indian/Alaska Native		Caucasian American/White		Hispanic		Asian American/Pacific Islander		Other/No Response	
	N	Average	N	Average	N	Average	N	Average	N	Average	N	Average	N	Average
Voc-Tech	177	18.4	4	18.3	3	21.0	153	18.8	6	15.0	2	12.5	9	15.9
2-yr College Degree	1,225	18.6	22	15.0	6	16.0	1,086	18.8	46	16.4	10	17.5	55	18.8
Bachelors Degree	11,539	21.8	171	17.9	36	19.3	10,490	21.9	243	19.5	151	21.0	448	21.8
Graduate Study	3,361	24.3	60	19.5	8	21.9	2,982	24.4	69	22.3	52	24.4	190	24.0
Prof. Level Degree	4,593	24.1	149	19.2	20	23.0	3,806	24.4	148	21.5	181	24.2	289	24.0
Other	537	19.8	11	16.5	1	12.0	458	20.0	17	17.6	12	20.3	38	19.6
No Response	945	22.2	31	17.1	7	19.4	766	22.5	27	18.0	21	22.9	93	22.6

**Table 4.3. Students' Score Report Preferences at Time of Testing**

Name	State	Total	Number of Students		Percent of Students in College Readiness Standards Ranges						
			1st Choice	2nd-6th Choice	01-12	13-15	16-19	20-23	24-27	28-32	33-36
IOWA STATE UNIVERSITY	Iowa	6,676	2,873	3,803	0	2	17	36	28	15	1
UNIVERSITY OF IOWA	Iowa	6,525	2,445	4,080	0	2	16	35	29	15	1
UNIVERSITY OF NORTHERN IOWA	Iowa	5,592	1,618	3,974	0	3	21	38	27	11	1
KIRKWOOD COMMUNITY COLLEGE	Iowa	1,570	516	1,054	1	7	38	36	15	3	0
DRAKE UNIVERSITY	Iowa	1,386	315	1,071	0	3	12	32	31	21	1
CENTRAL COLLEGE	Iowa	1,124	291	833	0	3	17	36	29	13	1
WARTBURG COLLEGE	Iowa	1,036	215	821	0	3	15	35	31	16	1
SIMPSON COLLEGE	Iowa	1,004	210	794	0	4	20	34	30	11	1
DES MOINES AREA COMMUNITY COLL-ANKENY	Iowa	894	377	517	2	9	37	34	15	3	0
HAWKEYE COMMUNITY COLLEGE	Iowa	737	240	497	0	9	40	36	12	3	0
COE COLLEGE	Iowa	660	139	521	0	3	23	40	24	9	1
LUTHER COLLEGE	Iowa	623	159	464	0	3	9	30	35	22	2
GRAND VIEW COLLEGE	Iowa	562	139	423	2	9	33	36	15	5	0
BUENA VISTA UNIVERSITY	Iowa	538	137	401	0	5	25	37	24	8	0
MORNINGSIDE COLLEGE	Iowa	535	153	382	0	5	26	40	21	7	1
NORTHWEST MISSOURI ST UNIV	Missouri	489	167	322	0	4	26	39	25	6	0
CREIGHTON UNIVERSITY	Nebraska	488	113	375	0	1	7	25	34	30	2
IOWA CENTRAL COMMUNITY COLL-FORT DODGE	Iowa	471	157	314	1	11	38	35	13	2	0
ST AMBROSE UNIVERSITY	Iowa	468	118	350	1	4	22	36	27	9	1
NORTHWESTERN COLLEGE	Iowa	450	135	315	0	2	17	31	33	16	1
IOWA WESTERN COMM C-COUNCIL BLFS	Iowa	443	192	251	0	10	37	33	17	4	0
LORAS COLLEGE	Iowa	438	113	325	0	3	22	34	26	13	1
MOUNT MERCY COLLEGE	Iowa	411	99	312	1	3	28	41	23	4	0
SOUTH DAKOTA STATE UNIVERSITY	South Dakota	400	120	280	1	2	21	41	27	9	1
UNIVERSITY OF SOUTH DAKOTA	South Dakota	378	86	292	1	5	21	39	25	9	1
NORTH IOWA AREA COMMUNITY COLL	Iowa	375	171	204	1	7	32	39	17	5	0
UNIVERSITY OF MINNESOTA-TWIN CITIES	Minnesota	369	71	298	0	1	11	29	35	22	2
UNIVERSITY OF NEBRASKA AT LINCOLN	Nebraska	358	90	268	0	2	11	35	35	15	2
INDIAN HILLS COMMUNITY COLL-OTTUMWA	Iowa	352	135	217	2	12	37	32	14	3	0
UNIVERSITY OF NEBRASKA AT OMAHA	Nebraska	318	82	236	0	5	22	37	26	9	1
All Other Institutions		17,215	4,446	12,769	1	5	21	30	24	17	3
Total		52,885	16,122	36,763	0	4	21	34	26	14	2

# Section V

# Optional Writing Test Results

**Table 5.1. Average ACT English and Writing Scores by Race/Ethnicity and Gender for students who took ACT Writing**

	N		English		Average ACT Scores			
					Essay		English/Writing Combined	
	State	National	State	National	State	National	State	National
<b>All Students</b>	<b>5,221</b>	<b>814,713</b>	<b>24.4</b>	<b>21.5</b>	<b>7.4</b>	<b>7.2</b>	<b>23.2</b>	<b>20.8</b>
African American/Black	111	96,225	19.7	16.5	7.0	6.4	19.4	16.5
American Indian/Alaska Native	14	5,489	24.6	18.9	7.9	6.7	23.8	18.5
Caucasian American/White	4,392	497,164	24.6	22.8	7.4	7.3	23.3	21.9
Hispanic	168	85,681	20.3	18.4	6.8	7.0	19.6	18.4
Asian American/Pacific Islander	167	44,716	25.0	23.5	7.4	7.6	23.7	22.8
Other/No Response	369	85,438	25.0	21.4	7.5	7.2	23.7	20.8
Males	2,203	357,025	24.4	21.1	7.2	6.9	22.9	20.3
Females	3,009	455,190	24.4	21.7	7.6	7.4	23.3	21.2
Missing	9	2,498	28.3	22.1	7.7	7.2	26.3	21.3



